

What is Claimed:

- sub B1*
1. A semiconductor device comprising:  
a conductive layer comprising aluminum;  
an insulating film formed on said conductive layer;  
a contact hole formed through said insulating film;  
a wiring being in contact with said conductive layer  
in said contact hole; and  
an element which belongs to groups 12 to 15 existing  
at a boundary between said conductive layer and said wiring and  
a vicinity thereof at a higher concentration than in other  
regions.
  - Sub B1*  
2. The semiconductor device of claim 1 wherein said  
wiring comprises aluminum.
  3. The semiconductor device of claim 1 wherein said  
element that belongs to groups 12 to 15 is one or a plurality of  
elements selected from the group consisting of germanium, tin,  
gallium, zinc, indium, and antimony.
  - Sub B1*  
4. The semiconductor device of claim 1 wherein said  
semiconductor device is an active matrix type EL display device.
  - sub B2*  
5. A semiconductor device comprising:  
a conductive layer comprising aluminum;  
an insulating film formed on said conductive layer;  
a contact hole formed through said insulating film;  
a wiring being in contact with said conductive layer  
in said contact hole; and  
an element which belongs to groups 12 to 15 existing  
at a boundary between said conductive layer and said wiring or a

*Cancel B2*  
vicinity thereof at a higher concentration than in other regions.

*Sub B2*  
6. The semiconductor device of claim 5 wherein said wiring comprises aluminum.

7. The semiconductor device of claim 5 wherein said element which belongs to groups 12 to 15 is one or a plurality of elements selected from the group consisting of germanium, tin, gallium, zinc, indium, and antimony.

*Sub B2*  
8. The semiconductor device of claim 5 wherein said semiconductor device is an active matrix type EL display device.

*sub B3*  
9. A semiconductor device comprising:  
two conductive films comprising aluminum being in contact with each other; and  
an element which belongs to groups 12 to 15 existing at a boundary between said two conductive films and a vicinity thereof at a higher concentration than in other regions.

10. The semiconductor device of claim 9 wherein said element which belongs to groups 12 to 15 is one or a plurality of elements selected from the group consisting of germanium, tin, gallium, zinc, indium, and antimony.

*Sub B3*  
11. The semiconductor device of claim 9 wherein said semiconductor device is an active matrix type EL display device.

*sub B4*  
12. A semiconductor device comprising:  
two conductive films comprising aluminum being in contact with each other; and

an element which belongs to groups 12 to 15 existing at a boundary between said two conductive films or a vicinity thereof at a higher concentration than in other regions.

13. The semiconductor device of claim 12 wherein said element which belongs to groups 12 to 15 is one or a plurality of elements selected from the group consisting of germanium, tin, gallium, zinc, indium, and antimony.

14. The semiconductor device of claim 12 wherein said semiconductor device is an active matrix type EL display device.

15. An insulated-gate field-effect semiconductor device comprising:

a wiring electrode comprising aluminum which is electrically connected to at least part of said semiconductor device through a contact hole formed through an interlayer insulating film; and

an element contained in the wiring electrode which element renders the wiring electrode flowable at 450°C or less.

16. The semiconductor device of claim 15 wherein said element is one or a plurality of elements selected from the elements belonging to groups 12 to 15.

17. The semiconductor device of claim 15 wherein said element is one or a plurality of elements selected from the group consisting of germanium, tin, gallium, zinc, lead, indium, and antimony.

18. The semiconductor device of claim 15 wherein said element is germanium contained in said wiring electrode at 20-40 atomic%.

19. The semiconductor device of claim 15 wherein said semiconductor device is an active matrix type EL display device.

20. A semiconductor device comprising:  
at least one thin film transistor formed over a substrate, said thin film transistor comprising at least a semiconductor region, a gate electrode, and a gate insulating film interposed therebetween;  
an interlayer insulating film formed over said thin film transistor;  
a contact hole formed through said interlayer insulating film;  
a wiring being in contact with said semiconductor region in said contact hole; and  
an element which belongs to groups 12 to 15 existing at a boundary between said semiconductor region and said wiring and a vicinity thereof at a higher concentration than in other regions.

21. The semiconductor device of claim 20 wherein said wiring comprises aluminum.

22. The semiconductor device of claim 20 wherein said element that belongs to groups 12 to 15 is one or a plurality of elements selected from the group consisting of germanium, tin, gallium, zinc, indium, and antimony.

~~23. The semiconductor device of claim 20 wherein said semiconductor device is an active matrix type EL display device.~~

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24. A semiconductor device comprising:  
at least one thin film transistor formed over a substrate, said thin film transistor comprising at least a semiconductor region, a gate electrode, and a gate insulating film interposed therebetween;  
an interlayer insulating film formed over said thin film transistor;  
a contact hole formed through said interlayer insulating film;  
a wiring being in contact with said semiconductor region in said contact hole; and  
an element which belongs to groups 12 to 15 existing at a boundary between said semiconductor region and said wiring or a vicinity thereof at a higher concentration than in other regions.

~~25. The semiconductor device of claim 24 wherein said wiring comprises aluminum.~~

26. The semiconductor device of claim 24 wherein said element that belongs to groups 12 to 15 is one or a plurality of elements selected from the group consisting of germanium, tin, gallium, zinc, indium, and antimony.

Sub  
27. ~~The semiconductor device of claim 24 wherein said semiconductor device is an active matrix type EL display device.~~